Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-69 (cancelled).

70. (Currently amended) A method for the selection and preparation of an effective antisense oligonucleotide for a nucleic acid comprising the steps of

- designing an antisense oligonucleotide corresponding to a target nucleic acid sequence, such that

  a) the antisense oligonucleotide comprises at least 8 nucleic acid residues,

  b) the antisense oligonucleotide comprises a maximum of twelve elements, ~~the twelve elements being capable of forming three hydrogen bonds each to cytosine bases~~, the elements being selected from the group consisting of guanosine and inosine,

  c) the antisense oligonucleotide does not contain four or more consecutive elements ~~capable of forming three hydrogen bonds each with four consecutive cytosine bases (CCCC)~~ within the target nucleic acid sequence,

  d) the antisense oligonucleotide does not contain two or more series of three consecutive elements ~~capable of forming three hydrogen bonds each with~~

~~three consecutive cytosine bases (CCC)~~ within the target nucleic acid sequence, and

e) the ratio of residues forming two hydrogen bonds each with the target nucleic acid sequence with respect to residues forming three hydrogen bonds each with the target nucleic acid sequence is

$$\frac{\text{3H-bond-R}}{\text{3H-bond-R} + \text{2H-bond-R}} \geq 0.29$$

wherein

- 3H-bond-R = residues forming three hydrogen bonds per residue and
- 2H-bond-R = residues forming two hydrogen bonds per residue,

– generating the designed antisense oligonucleotide, and

– synthesizing the generated antisense oligonucleotide.

71. (Previously presented) The method according to claim 70, wherein the four or more consecutive elements not contained in the antisense oligonucleotide are each guanosine.

72. (Previously presented) The method according to claim 70, wherein the three consecutive elements in the two or more series not contained in the antisense oligonucleotide are each guanosine.

73. (Previously presented) The method according to claim 70, wherein the generated oligonucleotide complies with the following specification

$$\frac{\text{3H-bond-R}}{\text{3H-bond-R} + \text{2H-bond-R}} = 0.33 \text{ to } 0.86.$$

74. (Previously presented) The method according to claim 70, wherein the generated oligonucleotides are modified for higher nuclease resistance than naturally occurring oligo- or polynucleotides.

75. (Previously presented) The method according to claim 74, wherein the generated oligonucleotides are modified at the bases, the sugars or the linkages of the oligonucleotides, preferably by phosphorothioate (S-ODN) internucleotide linkages, and/or methylphosphonate internucleotide linkages, N'3 -> P5' phosphoramidate linkages, peptide linkages or 2'-methoxyethoxy modifications of the sugar or modifications of the bases.

76. (Previously presented) The method according to claim 75, wherein the oligonucleotide has at least two different types of modifications.

77. (Previously presented) The method according to claim 70, wherein the oligonucleotides are reacted with folic acid, hormones such as steroid hormones or corticosteroids or derivatives thereof by linking the oligonucleotides covalently to or mixing with folic acid, hormones such as steroid hormones or corticosteroids, peptides, proteoglycans, glycolipids or phospholipids.

78. (Previously presented) An antisense oligonucleotide or derivative thereof obtainable according to the method according to claim 70 except oligonucleotides represented by SEQ ID NOS: 826-1272.